

REMARKS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-17 are presently pending in this application, Claims 1, 16 and 17 having been amended by the present amendment.

In the outstanding Office Action, Claims 1-6, 10-13, 15 and 16 were rejected under 35 U.S.C. §102(e) as being anticipated by Tybinkowski et al. (U.S. Patent 5,982,844); and Claims 7-9, 14 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tybinkowski et al.

Claims 1, 16 and 17 have been amended herein. These claim amendments find clear support in the original specification, claims and drawings. For example, amended Claims 1, 16 and 17 are supported by Figures 5 and 6. Hence, no new matter has been added.

Briefly, Claim 1 of the present invention is directed to a gantry of an X-ray computer tomography apparatus including an X-ray tube, an X-ray detector, a rotation ring mounting the X-ray tube and said X-ray detector, a ring frame rotatably supporting the rotation ring, a plurality of main posts supporting the ring frame such that the rotation ring is positioned between the main posts, and a plurality of props jointing to the main posts obliquely to reinforce the main posts. By providing such main posts, a gantry of an X-ray computer tomography apparatus according to the present invention can support the ring frame while effectively withstanding a centrifugal force of about 6 to 13G generated by high speed rotation of the rotation ring in an X-ray CT scanner capable of making one rotation per second or even half second without increasing its size and weight. Also, the gantry according to the present invention can tiltably support the ring frame.

The outstanding Office Action asserts that Tybinkowski et al. disclose a structure corresponding to “ a plurality of main posts tiltably supporting the ring frame” as recited in Claim 1. Nevertheless, Tybinkowski et al. do not teach a plurality of main posts supporting the ring frame such that the rotation ring is positioned between the main posts. On the contrary, Tybinkowski et al. disclose the disk 30 *fixedly attached to the front of the structure* comprised of frames. As such, not only is the Tybinkowski et al. scanner structurally different but also difficult to withstand a centrifugal force of 6-13G effectively unless it is extremely large in the axial direction of a patient’s body. Otherwise, the Tybinkowski et al. scanner would have to rotate slowly and keep the centrifugal force lower, resulting in a longer scanning time. Additionally, the disk 30 in Tybinkowski et al. cannot be tilted, since it is fixed to the structure. Therefore, the structure recited in Claim 1 is clearly distinguishable from Tybinkowski et al.

Because Tybinkowski et al. do not disclose the plurality of main posts as recited in Claim 1, Tybinkowski et al. would not in any way anticipate or render the structure recited in Claim 1 obvious.

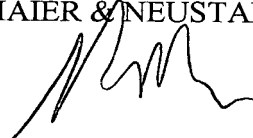
Likewise, independent Claims 16 and 17 include subject matter substantially similar to what is recited in Claim 1 to the extent discussed above. Thus, Claims 16 and 17 are also distinguishable from Tybinkowski et al.

For the foregoing reasons, Claims 1, 16 and 17 are believed to be allowable. Furthermore, since Claims 2-15 ultimately depend from Claim 1, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 2-15 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicant respectfully submits that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Registration No. 25,599
Robert T. Pous
Registration No. 29,099
Attorneys of Record



22850

Tel: (703) 413-3000

Fax: (703) 413-2220

GJM/RTP/AY:ys

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IN THE CLAIMS

Please amend Claims 1, 16 and 17 as follows:

--1. (Twice Amended) A gantry of an X-ray computer tomography apparatus comprising:

an X-ray tube;

an X-ray detector;

a rotation ring mounting said X-ray tube and said X-ray detector;

a ring frame rotatably supporting said rotation ring;

a plurality of main posts [tiltably] supporting said ring frame such that said rotation ring is positioned between said main posts; and

a plurality of props jointing to [the] said main posts obliquely to reinforce [the] said main posts.

16. (Twice Amended) A gantry of an X-ray computer tomography apparatus comprising:

an X-ray tube;

an X-ray detector;

a rotation ring mounting said X-ray tube and said X-ray detector;

a ring frame rotatably supporting said rotation ring;

a plurality of main posts [tiltably] supporting said ring frame such that said rotation ring is positioned between said main posts; and

a plurality of reinforce members for reinforcing [the] said main posts.

17. (Twice Amended) A gantry of an X-ray computer tomography apparatus comprising:

an X-ray tube;

an X-ray detector;

a rotation ring mounting said X-ray tube and said X-ray detector;

a ring frame rotatably supporting said rotation ring;

a plurality of main posts [tiltably] supporting said ring frame such that said rotation ring is positioned between said main posts; and

a plurality of triangle blocks configured to reinforce [the] said main posts.--